Scientist (f/m/d) CASUS Topical study of the Large-Scale Structure of the Universe

The position will be available from 1 November 2022. The employment contract is limited to six months. The Scope of Your Job: Applicants (f/m/d) will be part of the CASUS research team for topical study of the large-scale structure formation of the Universe under supervision of Prof. Alexander Zhuk and will be working closely with the CASUS Professional Support Team.

City: Görlitz; Starting Date: 01/11/22; Renumeration: TVöD Bund; Reference number: 2022/150; Closing date: 15/09/22

Working field

- Development of a software package for cosmic screening approach by modifying an existing one such as evolution
- Simulation of power spectra for perturbations of metric, energy density and matter density
- Study of the influence of simulation box size on correlation functions
- Manifestation of the cosmic screening effect in extra-large simulation boxes (5Gpc and bigger)

Requirements

- Excellent knowledge of general and theoretical Physics at the Master's level
- Excellent knowledge of calculating of the inhomogeneous gravitational field in cosmological systems of discrete particles
- Programming skills in languages such as Python and/or C++ or comparable languages
- Experience in parallel computing, high performance computing and relativistic N-body cosmological simulation codes
- Usage of a programming language such as Python for data analysis and data visualization
- Strong motivation to work in a collaborative environment
- Excellent communication skills in English and in a professional context (presentation of
What We Offer

- A vibrant research community in an open, diverse and international work environment
- Scientific excellence and extensive professional networking opportunities
- The employment contract is limited to six months
- Salary and social benefits in accordance with the collective agreement for the public sector (TVöD-Bund) including 30 days of paid holiday leave, company pension scheme (VBL)
- We support a good work-life balance with the possibility of part-time employment and flexible working hours
- Numerous company health management offerings

Application
Kindly submit your completed application (including cover letter, CV, diplomas/transcripts, etc.) only via our Online-application-system: https://www.hzdr.de/db/Cms?pNid=490&pLang=en&pOid=66978

More information at https://stellenticket.de/150672/DDC/
Offer visible until 15/09/22